

Title (en)

Scale removal and prevention device.

Title (de)

Vorrichtung zur Beseitigung von Kesselstein bzw. zur Verhütung der Bildung von Kesselstein.

Title (fr)

Dispositif pour l'élimination et la prévention de la formation du tartre.

Publication

EP 0525835 B1 19950405 (DE)

Application

EP 92118136 A 19900621

Priority

- DE 3921860 A 19890704
- EP 90111714 A 19900621

Abstract (en)

[origin: EP0406622A2] The invention relates to a scale removal and prevention device in pipe systems through which a liquid, eg. water, flows, the liquid being exposed to the magnetic field of at least one magnet coil surrounding an axis of the housing, having an interior formed in a housing and subdivided by at least one baffle plate into at least two chambers, to be precise into a first chamber, provided with an inlet opening, and into a second chamber, provided with an outlet opening, the two chambers being connected by a multiply developed flow path constructed in the interior of the housing, and having an electric supply circuit for the at least one magnet coil, which circuit has a control device for driving the at least one magnet coil, which switching device is driven by a control device and has a direct current which periodically changes its polarity and in a first operating state of the switching device flows through the magnet coil in a first, preferably longer time interval in a first direction, and in a second operating state of the switching device flows through the magnet coil in a second, preferably shorter time interval in a second, inverse direction. <??>The invention is characterised in that the switching device has at least a third operating state, in which the flow of current through the at least one magnet coil is interrupted, and that the switching device assumes said third operating state respectively between a first and a second or between a second and a first operating state. <IMAGE>

IPC 1-7

C02F 1/48

IPC 8 full level

C02F 1/48 (2006.01); **C02F 5/08** (2006.01)

CPC (source: EP US)

C02F 1/484 (2013.01 - EP US); **C02F 2201/4613** (2013.01 - EP US); **C02F 2201/4617** (2013.01 - EP US); **C02F 2201/483** (2013.01 - EP US); **C02F 2303/22** (2013.01 - EP US)

Cited by

EP3539931A1; US10934185B2; EP3546430A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0406622 A2 19910109; **EP 0406622 A3 19910327**; **EP 0406622 B1 19930901**; AT E120722 T1 19950415; AT E93819 T1 19930915; CA 2020153 A1 19910105; CA 2020153 C 19971230; DE 59002536 D1 19931007; DE 59008868 D1 19950511; DK 0406622 T3 19940207; EP 0525835 A2 19930203; EP 0525835 A3 19930303; EP 0525835 B1 19950405; ES 2043186 T3 19931216; US 5106491 A 19920421

DOCDB simple family (application)

EP 90111714 A 19900621; AT 90111714 T 19900621; AT 92118136 T 19900621; CA 2020153 A 19900629; DE 59002536 T 19900621; DE 59008868 T 19900621; DK 90111714 T 19900621; EP 92118136 A 19900621; ES 90111714 T 19900621; US 54461090 A 19900627